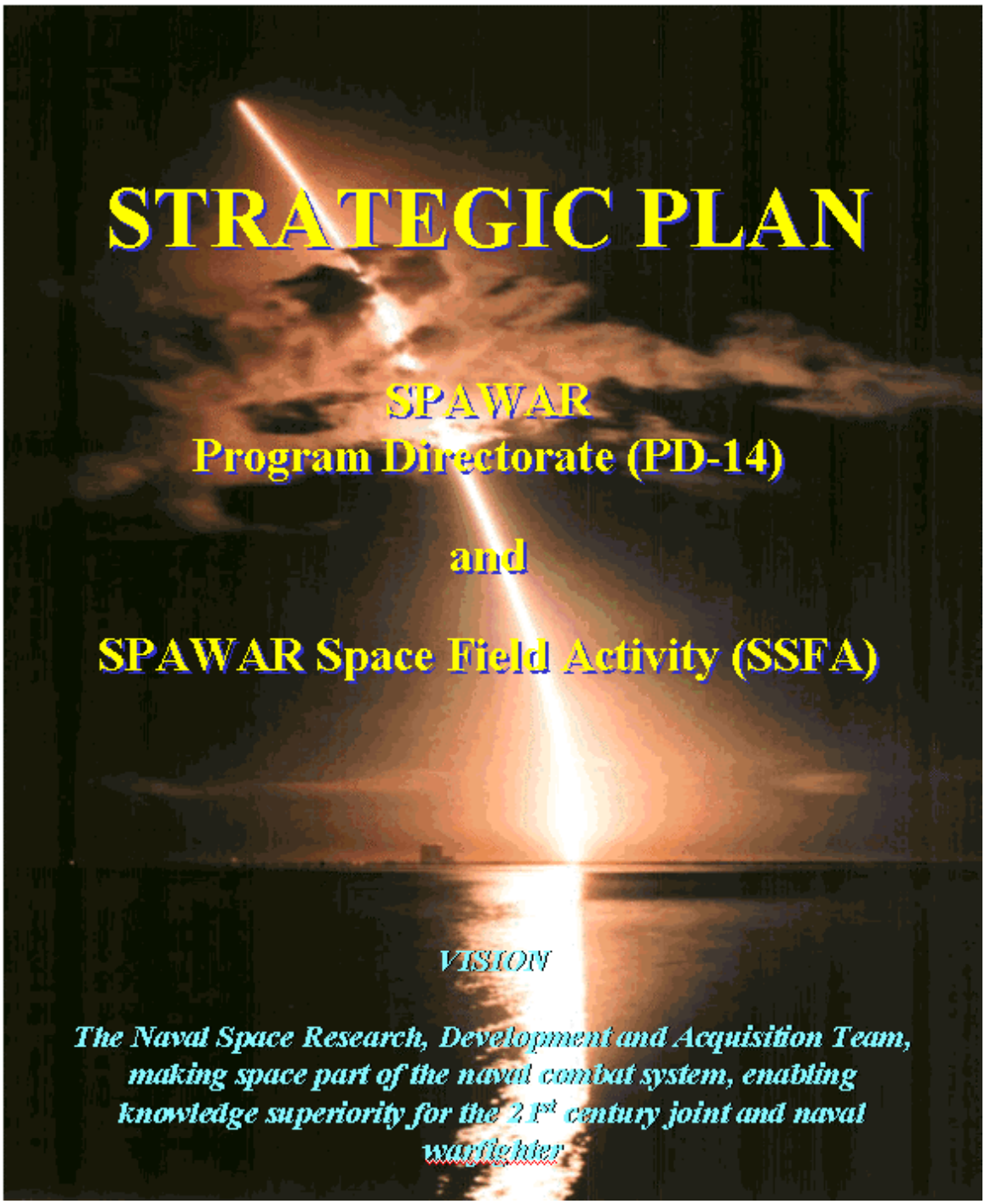
STRATEGIC PLAN
SPAWAR
Program Directorate (PD-14)
and
SPAWAR Space Field Activity (SSFA)
VISION
The Naval Space Research, Development and Acquisition Team, making space part of the naval combat system, enabling knowledge superiority for the 21st century joint and naval warfighter

From the Director
SPAWAR Space Technology Systems Program Directorate – Commander SPAWAR Space Field Activity

12 February 2001

In November 1999 the Department of the Navy consolidated its space acquisition programs and its participation in national space programs under a single flag position, the Director, Space Technology Systems Program Directorate (PD-14) and Commander, SPAWAR Space Field Activity (SSFA).

I am committed to the goal of improving warfighting effectiveness by making space part of the combat system. To succeed in this effort our naval space research, development, and acquisition (RD&A) organizations---all of which are centers of excellence with unlimited potential---must work as a team. We must develop and maintain a world-class space personnel cadre, provide mechanisms to better coordinate our space research, development and acquisition activities, improve our leverage of and support for the national space programs, and increase our collective shared awareness of the opportunities space offers in supporting naval warfighting missions.

This plan, which is consistent with the SPAWARSYSCOM corporate strategic plan, provides overall direction and guidance, and establishes objectives. Appendices containing implementation actions and team assignments will be distributed following the command offsite scheduled for 22 February 2001.

Respectfully,

Rand Fisher
RDML, USN

PD14-SSFA Leadership Team

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I. Purpose

The purpose of this plan is to articulate specific objectives and actions that, when accomplished, will coordinate and strengthen naval space technology, research, development and acquisition (RD&A) activities with the goal of making space a part of the naval combat system.

II. PD-14 / SSFA's Role in The Naval / National Space Communities

Naval forces are uniquely and critically dependent on the support and products of space systems for communications, navigation, environmental, intelligence, surveillance, reconnaissance and other functions that can be provided most effectively from space. Recognizing this, the Department of the Navy (DoN) in its 1993 Space Policy committed itself to integrating space into every facet of naval operations, including requirements and resourcing, doctrine and policy, technology and systems development, acquisition, operations, a supporting cadre of personnel with expertise in space, and maximum leverage of non-DoN systems and organizations.

Within the Department of the Navy, senior leadership for space matters is provided by the Assistant Secretary of the Navy, Research, Development and Acquisition, (ASN RD&A); Director, Space Information Warfare Command & Control (CNO-N6); and the Director, Plans, Policy and Operations, HQMC. They also comprise the Executive Committee (EXCOM) of the Naval Space Board.

The Space and Naval Warfare Systems Command (SPAWAR) Space Technology Systems Program Directorate (PD-14) and the SPAWAR Space Field Activity (SSFA) are integral parts of the naval space community and the SPAWAR Corporation, from which they derive their mission and strategic guidance. The DoN has designated the Director, Space Technology Systems Program Directorate (PD-14) and Commander, SPAWAR Space Field Activity (SSFA) as a single, flag-level focal point for naval space technology research, development and acquisition. PD14/SSFA will ensure a coordinated naval approach to effectively make space systems and capabilities an integral part of the naval combat system. In support of this designation, the Chief of Naval Research has assigned the Director, Naval Center for Space Technology (NCST) additional duty as the Chief Space Engineer of the SSFA.

The partnership between the Department of the Navy and the National Reconnaissance Office (NRO) was reaffirmed in 1996 by a Memorandum of Understanding, and strengthened in 1999 when the Director, NRO assigned Commander, SSFA as Director, NRO Communications Directorate, with additional responsibilities for managing naval participation in the NRO. Also, the Director, NRO and the Under Secretary of the Navy jointly chartered the Naval-NRO Coordinating Group (NNCG) as the primary focal point for Naval-NRO cooperation. The NNCG reports through Commander SSFA and the Naval Space Board to the Director, NRO and the EXCOM of the Naval Space Board.

III. Our Vision and Mission

Vision

The Naval Space Research, Development, and Acquisition Team, making space part of the naval combat system, enabling knowledge superiority for the 21st century joint and naval warfighter.

Mission Statements

SPAWAR Space Technology Systems Program Directorate (PD-14) – *Develop, acquire, integrate, test, produce, launch, and provide operational support to affordable, flexible and seamless space systems that support joint, combined and naval operations; coordinate all Department of the Navy space research, development, and acquisition programs.*

SPAWAR Space Field Activity (SSFA) *– Provide line management staffing of the National Reconnaissance Office; coordinate naval space research, development, and acquisition activities between NRO and other non-naval space programs; and provide naval space and warfare experience to develop superior and affordable space systems in support of national missions and joint, combined and naval operations.*

IV. Achieving Our Vision

To achieve success---to *make space part of the naval combat*---we must achieve the following objectives:

Objective 1: Build and maintain a world-class space RDA team

*People are the first---and the most important---part of the resource base Navy must have to make effective use of space sys*tems. To develop naval space capabilities, to ensure that non-naval space programs fulfill naval needs and requirements, and to integrate space into naval combat systems, tactics, and doctrine, Navy first must develop and maintain a cadre of people who are space-knowledgeable and who also have a fundamental understanding of naval warfare.

This requires a focused, sustainable effort to recruit, train and educate, promote, and retain career naval people, both military and civilian, who are qualified in space technology, acquisition, and operations disciplines, and who can compete for leadership positions in both naval and non-naval space programs. It requires effective long-range planning and continuing management support by the lead organizations for space research, development, and acquisition.

PD-14/SSFA will develop, in coordination with the Chief of Naval Personnel, Assistant Secretary of the Navy (M&RA), community and resource sponsors, the Naval Postgraduate School, and the SPAWAR Corporation, the necessary processes to ensure 1) effective career development for military and civilian space RDA personnel through flag and SES; 2) the effective utilization of space RDA personnel, and 3) the availability of qualified candidates to fill critical RDA positions in Navy, other DoD, and national space organizations.

To provide the management focus and the processes required to develop and sustain the space RDA cadre, PD-14/SSFA will:

- Establish goals for community size, distribution and placement of people in naval, other DoD, and national space organizations.
- Develop management plans, tools and processes:
  -- Organization and resource plan
  -- Career paths for space RDA personnel through flag and SES
  -- Recruiting, training, and postgraduate education plan
  -- Succession plan for key leadership positions
  -- Cadre database
  -- Mentoring/counselling program

-- Metrics for evaluating progress

- Establish a Cadre Development Working Group to coordinate action and assess progress.

Objective 2: Provide a relevant and enduring space S&T program to be the foundation for effective exploitation of space by naval warfighters

The foundation of effective naval exploitation of space is technology. A robust and enduring space science and technology (S&T) program is required to enable DoN to aggressively develop space capabilities that respond directly to naval warfighter needs. Through joint efforts and partnerships this program leverages technology efforts in other government organizations and private industry to create innovative, naval-specific solutions to operational problems, and to go beyond established requirements, to anticipate emerging fleet needs for support from space systems.

The naval space S&T program must be based on a long-range plan that is consistent with Naval Strategic Planning Guidance and is directly tied to relevant future naval capabilities. With long-term funding support it must provide not only technology demonstrations, including prototype development and on-orbit demonstrations, but must support the transition of mature technologies to acquisition programs. It must be coordinated with national space technology programs, naval and other DoD space programs, and naval combat systems development programs. Finally, it must be linked closely to fleet operators and to naval and joint space operational components.

PD-14/SSFA will support the Chief of Naval Research, the Naval Research Laboratory, and Navy and Marine Corps resource sponsors in planning and maintaining the naval space technology base, and in coordinating space technology efforts with national, naval, and other DoD space programs. The SSFA Chief Engineer, who is also Director, Naval Center for Space Technology, will provide essential leadership, technical support, and coordination.

To achieve this objective requires that a long-range investment strategy for space S&T be developed in coordination with naval leadership. Therefore, in coordination with the Chief of Naval Research, requirements sponsors, and the Naval Space Board, PD-14/SSFA will:

- Develop a naval space S&T strategy and plan in conjunction with the Naval Space Master Plan, with annual updates.
- Support creation of a Naval Space Research Council for community-wide coordination
- Pursue strategic partnerships with DARPA, NRO, NASA, AFRL, and other organizations.
- Establish a Naval Space Technology Working Group to coordinate action and assess progress.
- Ensure that space S&T investment and transition plans are fully integrated with those for C4ISRT/IT and naval combat systems.

Objective 3: Ensure all space systems satisfy naval combat needs and requirements

Navy and Marine Corps' critical dependence on space---and the fact that most space systems are developed by non-naval organizations---means that DoN must have a carefully orchestrated strategy for ensuring that space systems meet naval operational requirements. To accomplish this objective, resources and coordination processes must ensure that 1) formal requirements for space systems accurately reflect naval warfighting needs; 2) space systems, in their final "end-to-end" design and implementation are in fact capable of delivering the products and tools needed by naval warfighters; and 3) in cases where space systems proposed by or developed by others do not satisfy critical naval requirements, DoN is prepared to offer alternative proposals, or fill the gap by acquiring its own system or purchasing services commercially.

Inasmuch as DoN is largely dependent on other organizations to acquire systems and deliver space services to naval forces, the strategy will focus heavily on partnering relationships with other space providers, principally the NRO and Air Force. Partnerships enable joint developments to pursue leading-edge, naval-specific applications of new technologies. Partnerships also enable DoN to place people with backgrounds in naval warfare in leadership positions in those programs which are critical to naval operations to protect DoN interests, ensure satisfaction of requirements, and keep naval seniors informed with respect to emerging problems and opportunities.

In support of the Chief of Naval Operations (N6), Commandant of the Marine Corps (PP&O), and Assistant Secretary of the Navy (RDA, PD-14/SSFA will:

- Pursue strategic partnerships with military, commercial, and civil space providers, patterned after the DoN-NRO partnership.
- Place senior SSFA military and civilian personnel in key positions in all space programs to ensure that naval warfighters' needs are fully integrated at all levels.
- Create a strong network among SSFA personnel assigned to DoD, national, and naval organizations to ensure all are familiar with naval needs and priorities.
- Expand NNCG's role in the NRO to track and prioritize all pertinent NRO programs, projects, experiments, demonstrations, and technology developments to ensure timely integration with naval system developments.
- Create coordination groups, patterned after the NNCG, to implement new partnerships.
- Support naval participation in requirements development for space systems, ensuring clarity with respect to technology and acquisition issues, and maintaining close coordination with other services.
- Maintain an experienced space acquisition workforce to acquire naval-unique space systems and DoD space systems as assigned.

Objective 4: Influence naval combat systems to make maximum use of space capabilities.

The Naval Space Policy commits DoN to integrate space into every facet of naval operations, and to optimize space-based support to the lowest tactical level. To accomplish this goal it is necessary not only to ensure that space systems meet naval operational needs, but also to provide naval systems with the necessary tools and knowledge to effectively use space. This requires planning to synchronize naval, joint and national programs so that weapon design, communications networks, shipboard terminals, and associated training programs fully incorporate space capabilities.

Effective planning begins with requirements for naval systems, and after programs are initiated, a C4ISRT plan that integrates space products with those of other non-organic and organic sources. A prime example is the early involvement, through the Naval-NRO Coordination Group, of national programs in the DD-21 Program. As programs mature, space providers must remain engaged until full operational capability is attained.

The technology efforts underway in national space program offices, Navy and Marine Corps TENCAP Programs, Naval Center for Space Technology, SPAWAR Systems Centers, and other "centers of excellence" produce operational concepts and prototypes of tools that enhance the value of space to the warfighter---if they are properly transitioned to warfighting systems. This requires awareness of opportunities, and timely action on the part of Navy and Marine Corps to POM for resources.

Finally, space providers must be engaged in the process of planning the C4ISRT architecture which will enable naval forces to implement the concept of network-centric operations. This entails support to operational and technical architectural planning at fleet and service headquarters, the Chief Engineer (CHENG), and systems commands.

To support and influence naval systems' development, PD14/SSFA will:

- Develop a comprehensive Naval Space Master Plan to synchronize the full spectrum of DoN space activities with joint/national space activities.
- Expand the NNCG's role to influence resources and effect change by linking the national space programs with DoN resource sponsors, with the Chief Engineer of the Navy, with systems commands, and with warfare development commands.
    -- Provide a regularly updated "opportunities" plan.
    -- Periodically report on how naval needs are being met.
- Ensure that operational needs for space support become part of the JROC, NRB, and PPBS processes.
- Ensure that space capabilities, operational concepts, and technologies are part of the integrated C4ISRT/IT/Space capability delivered to the fleet by the SPAWAR Corporation and other naval systems commands.

Objective 5: Achieve a shared awareness of naval space technology and RDA activities, capabilities, issues and opportunities.

To make the most effective use of space in the future, naval leadership must be aware of the operational utility, as well as limitations, of space capabilities. It must also be kept aware of opportunities for enhancing the utility of space systems and programmatic issues related to future systems. There is a particularly urgent need for awareness with respect to space technology and RDA because most of the programs are outside the control of naval leadership. Participation in non-naval space programs, which is the responsibility of the SPAWAR Space Field Activity, provides not only the naval expertise to ensure requirements satisfaction but also an information conduit to naval leadership.

In addition to the leadership, naval people, military and civilian, at all levels must be aware of space issues, as well as career opportunities related to space. By crafting a coherent message concerning space opportunities, and by communicating regularly with all levels, we can accelerate the pace of integrating space effectively into the combat system.

Although the objective of shared awareness is inherent in the accomplishment of all our objectives, the dynamic nature of leadership transition and technology opportunities require specific attention to communicating "space awareness." Hopefully, awareness leads to appreciation, then influence, and finally, action.

To accomplish this objective, PD-14/SSFA will:

- Serve as a focal point for dissemination, using all available media, of information about naval and non-naval space RDA programs. Coordinate with Naval Space Command, Naval Center for Space Technology, Naval Postgraduate School, Navy and Marine Corps TENCAP Offices, and other organizations to ensure consistency with ongoing space information and educational activities.

- Maintain a dialogue with senior naval leadership regarding space issues and opportunities as seen through naval and non-naval space programs.

- Expose senior Washington-area staff and leadership to NRO plans and programs through visits, briefings, conferences, and seminars arranged by the Naval-NRO Coordination Group

- Promote a high level of professionalism and sense of community among space RDA cadre, and communicate with others interested in careers in space and information technology.